USDA
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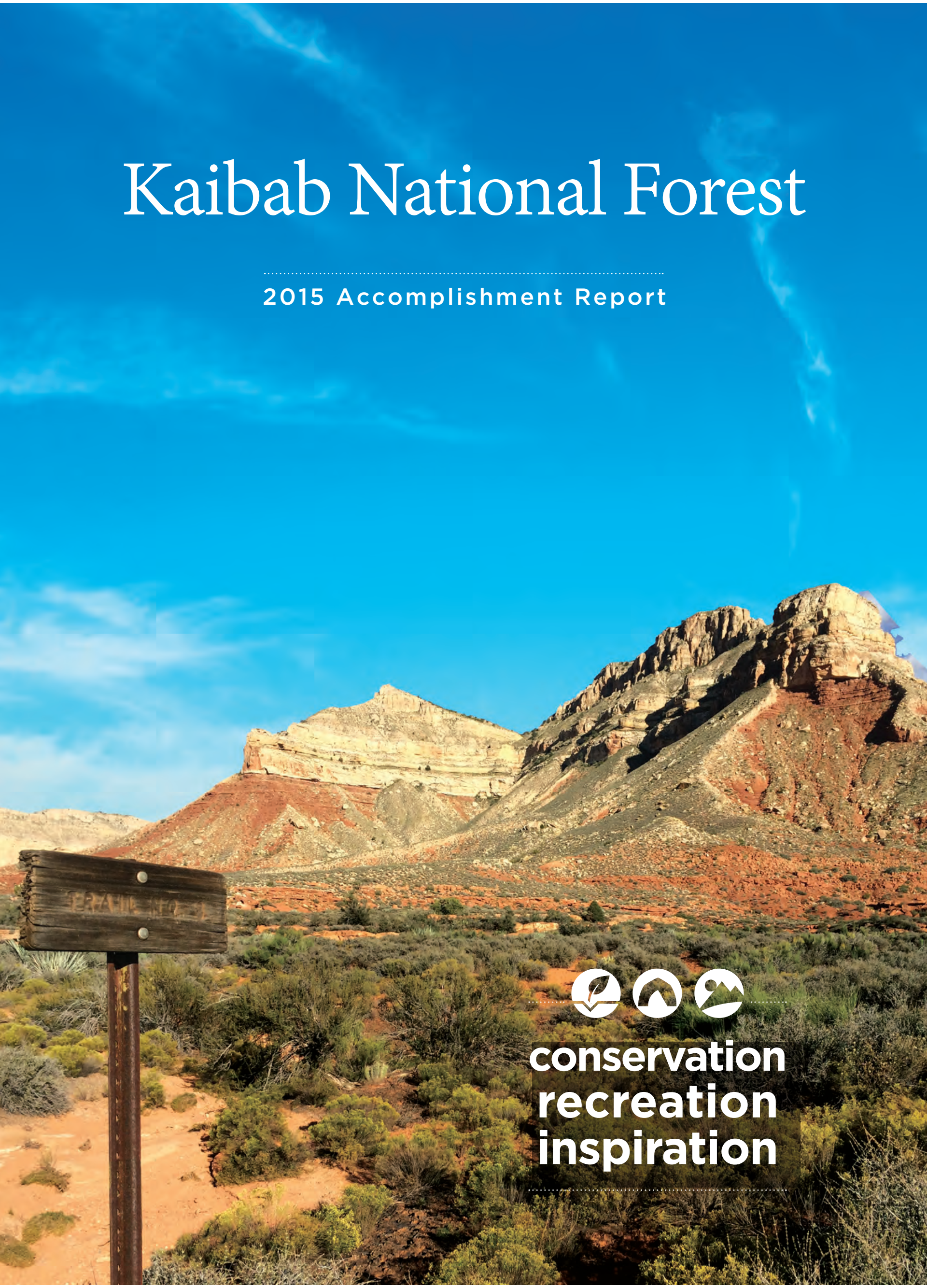
Kaibab National Forest

2015 Accomplishment Report



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Message from the Forest Supervisor

As the new Forest Supervisor of the Kaibab National Forest, I am working to share my key values, priorities and vision for the forest with employees, partners, stakeholders, community members and others. Knowing where we are heading and why will help keep us on course toward achieving the shared goals we have for this beautiful and unique landscape.

"Caring for the land and serving people" is our motto and as such we strive for outstanding public service. We attract employees with a genuine interest in natural and cultural resources and land management, and employees who are dedicated to serving the public.

The employees of the Kaibab are here to assist in sustaining the health, diversity and productivity of the Kaibab National Forest, with the goal of ensuring we are delivering the benefits the public desires. We are focused on fostering resilient, adaptive ecosystems to mitigate climate change so that we can continue to deliver the values, uses, products and services that people want and need, such as clean air and water, high quality recreation settings and opportunities, forest products, cultural site protection, and healthy habitats for plants, wildlife and aquatic species.

A healthy landscape is one that will be resilient in the face of stresses and disturbances like drought and wildfire. Our work focuses on reducing wildfire risk by restoring fire adapted ecosystems; conserving open space; providing abundant clean water; strengthening communities; and connecting people to the outdoors. We are able to do that by strengthening ties to both the communities we serve and to our partners, so that together we can provide the greatest good both now and into the future. Applying our understanding of how the public wants to use the forest requires collective stewardship and collaboration with a wide range of partners to complement our own efforts. We work with tribal, state and local governments along with universities, non-profits and industry.

National Forests are there for the benefit of not the few, but of all Americans. We strive to have our citizens engaged with their natural and cultural heritage by connecting them with their National Forests. A particular focus on youth will help instill a land ethic that ensures the continued existence and protection of our Nation's public lands.

If I haven't met or worked with you already, I look forward to the opportunity to collaborate with you on these and other priorities and goals for the Kaibab!

How do you recreate?

Visitors to the Kaibab participate in lots of different recreational activities. Some of the most popular include the following:

- Scenic viewing • Hiking or walking
- Wildlife viewing • Scenic or pleasure driving • Relaxing • Developed camping
- Visiting historic sites • Picnicking
- Nature study • Primitive camping
- Bicycling • Fishing • Hunting
- OHV use • Horseback riding
- Backpacking • Gathering forest products

So what are you going to try today?
So many options!

Dispersed camping on the Kaibab is unbeatable!

There are basically two types of camping on the Kaibab: camping in a developed campground and dispersed camping. Dispersed camping is the term used for camping anywhere in the forest outside of a developed campground. Dispersed camping is free and, therefore, there are no services such as trash removal, and there are few, if any, facilities such as tables and fire pits.

There are extra responsibilities and skills that are necessary for dispersed camping. However, for those who take those responsibilities seriously, dispersed camping on the Kaibab can offer incredible opportunities for peace, solitude, discovery, adventure and fun for the entire family. Few forests can rival the off-the-beaten path feel of a dispersed camping trip to the Kaibab!

Keep close to Nature's heart… and break clear away, once in a while, and climb a mountain or spend a week in the woods. Wash your spirit clean.

– JOHN MUIR, NATURALIST AND AUTHOR

North Kaibab Ranger District adds another cabin to public rental program

The Kaibab National Forest added another cabin to its public rental offerings as part of the popular "Rooms with a View" cabin rental program. The program provides visitors to national forests in Arizona with a unique recreational opportunity to experience an overnight stay in a historic Forest Service cabin.

The most recent addition to the Kaibab's offerings is Jumpup Cabin on the North Kaibab Ranger District. Built in 1906 and situated at the mouth of Jumpup Canyon, the historic cabin offers a panoramic view of Kanab Creek Wilderness and easy access to the remote and challenging Ranger Trail #41.

Other cabins that can be rented by the public on the Kaibab National Forest are Spring Valley Cabin on the Williams Ranger District, Hull Cabin on the Tusayan Ranger District, and the Big Springs Cabins on the North Kaibab Ranger District.

Spring Valley Cabin was originally the residence for rangers working at a nearby guard station. Besides the remodeling of the kitchen and restroom, Spring Valley Cabin is the original design from 1917. Enjoy spectacular views, unparalleled wildlife viewing opportunities, and convenient cross-country ski and hiking trails.

Hull Cabin, located just a mile south of the Grand Canyon, is the oldest surviving historic cabin near the Grand Canyon's south rim. This rustic cabin was built in the late 1880s as part of a sheep ranch and was acquired by the Forest Service in 1907 for use as a ranger station. It is located in a secluded stand of mature ponderosa pine trees. The small Hull Tank, located on the cabin grounds, is a prime watering hole for wildlife including elk, mule deer, black bear, wild turkey, javelina and numerous birds and raptors.

The Big Springs Cabins are about a 35-minute drive from the Rainbow Rim Trail, a winding 18-mile hiking and mountain biking trail that offers stunning views from five scenic overlooks along the north rim of the Grand Canyon. The cabins are a perfect base camp for day hikes on the Kaibab Plateau or for group retreats in the cool pines. Visitors can enjoy picnicking, sightseeing, wildlife viewing and access to additional scenic overlooks of the Grand Canyon and other points of interest.

"During the Search and Rescue for a lost child on the North Kaibab Ranger District, I learned that the Kaibab National Forest is a very team driven organization. In a moment's notice, forest personnel were readily available for anything needed for the SAR operations. Everyone wanted a positive outcome to this difficult event and provided any expertise they had to assist."

Susan Nixon, Assistant Center Manager • Williams Dispatch Center

Campgrounds of the Kaibab – There's something for everyone!

North Kaibab Ranger District

Jacob Lake Campground

Jacob Lake Campground is conveniently located in Jacob Lake, Ariz., the gateway to the Grand Canyon's North Rim. The campground is nestled among the towering ponderosa pine trees of the Kaibab Plateau. Opportunities to enjoy nature are everywhere, from hiking and mountain biking to birding and scenic driving.

DeMotte Campground

DeMotte Campground is located just 7 miles north of the entrance to the Grand Canyon National Park's North Rim. Visitors to DeMotte Campground enjoy wildlife viewing, picnicking, hiking and sightseeing through a gorgeous mixed conifer forest near one of the wonders of the world.

Indian Hollow Campground

Indian Hollow Campground offers a refreshingly unique camping experience for those lucky enough to experience it. It is a free-use, primitive campground with only three sites. Located just a short distance from the Grand Canyon's North Rim, this campground puts you close to unparalleled scenic views and hiking access to the Grand Canyon's Thunder River Trail.

Tusayan Ranger District

Ten-X Campground

Ten-X Campground is located just 4 miles from the south entrance to Grand Canyon National Park. Situated in a beautiful ponderosa pine/gambel oak forest, Ten-X is a quiet, peaceful campground that offers an established short nature hiking trail and outstanding opportunities for wildlife viewing, scenic driving and solitude.

Williams Ranger District

Kaibab Lake Campground

Kaibab Lake is a lovely place to spend a few hours or a few days. It is located a couple of miles north of Williams, Ariz., and is popular for fishing, picnicking and bringing together the family for a getaway in the cool ponderosa pines of northern Arizona.

Dogtown Lake Campground

Dogtown Lake, 8 miles southeast of Williams, is surrounded by ponderosa pine forest and has a spectacular view of Bill Williams Mountain, the westernmost mountain above 9,000 feet in Arizona. Near the lake, visitors can enjoy a guided nature trail and a hiking trail that leads to a scenic overlook of the area from the top of nearby Davenport Hill.

White Horse Lake Campground

This extremely popular fishing lake is located 19 miles southeast of Williams. In addition to fishing, the area around this campground offers excellent opportunities for hiking, mountain biking and wildlife watching. A trail following the lakeshore and one to Sycamore Canyon Vista are nearby. In addition, a number of forest attractions are close to the campground, such as Sycamore Point, JD Dam, and the Overland Trail.

Rocky Mountain Elk Foundation partnership to aid ailing grasslands

During 2015, the Rocky Mountain Elk Foundation granted the Kaibab $40,000 to restore grasslands on the Williams and Tusayan districts. The Southwestern landscape has been greatly altered over the past century by the encroachment of woody plants, particularly juniper and pinyon into areas that were formerly grasslands and open pinyon-juniper woodlands, also known as savannahs. This encroachment ranges from a few to hundreds of trees per acre, with the highest level occurring along the transition zone from grasslands to woodlands. The funding received will restore approximately 500 to 600 acres of grasslands on the Williams Ranger District in Game Management Unit 7W, and 300 to 400 acres of grasslands on the Tusayan Ranger District in Game Management Unit 9.

Personal and free-use firewood
(for home heating and other purposes)
Forest total – 12,146 cords

Bison on the North Rim

The Kaibab National Forest is a cooperating agency with the National Park Service, Arizona Game and Fish Department, and Bureau of Land Management in developing a bison management plan and environmental assessment to address resource impacts from a large herd of bison that has taken refuge on the Grand Canyon National Park's North Rim.

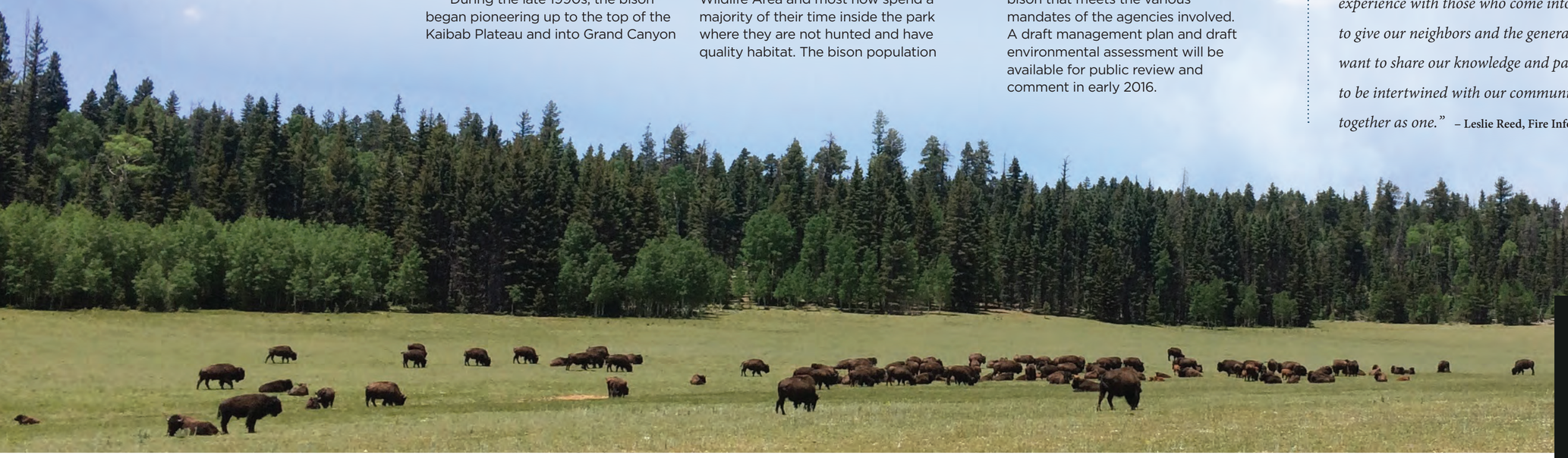
A herd of bison was brought to the Arizona Strip in the early 1900s and has been managed since 1950 by the Arizona Game and Fish Department in the House Rock Wildlife Area on the Kaibab National Forest through an interagency agreement. The animals are considered a wildlife game species and are the property of Arizona, managed by the department.

During the late 1990s, the bison began pioneering up to the top of the Kaibab Plateau and into Grand Canyon National Park. A combination of public hunt pressure, drought and fire, and reduced forage quality in House Rock Valley during the 1990s may have contributed to the bison moving through Saddle Mountain Wilderness and onto the higher elevations of the Kaibab Plateau and Grand Canyon.

Over the past several years, few bison have returned to House Rock Wildlife Area and most now spend a majority of their time inside the park where they are not hunted and have quality habitat. The bison population is currently at an estimated 500+ animals, a level that is having undesirable environmental effects inside the park.

The Grand Canyon National Park initiated a National Environmental Policy Act analysis in April 2014 to address the bison issue. Ultimately, the action selected for implementation will provide the basis for a long-term, interagency approach to managing bison that meets the various mandates of the agencies involved. A draft management plan and draft environmental assessment will be available for public review and comment in early 2016.

"The public is at the forefront of our minds, no matter what we are trying to accomplish. The phrase 'Caring for the land and serving people' isn't just a phrase but something I've seen every day in action and been a part of, from our archaeologists stopping to chat with visitors at Keyhole Sink, to interacting with local businesses, to teaching fire prevention programs in our local schools with Smokey Bear, to participating in community parades, to our information receptionists sharing their knowledge and personal experience with those who come into our offices. Our employees truly care and want to give our neighbors and the general public the utmost experience on our forest. We want to share our knowledge and passion for where we work. We have the ability here to be intertwined with our communities, and we are taking every step to do so, to work together as one." **– Leslie Reed, Fire Information Officer • Williams and Tusayan Ranger Districts**



Four Forest Restoration Initiative achieves planning milestone

The Four Forest Restoration Initiative (4FRI) is the largest landscape-scale forest restoration project in the nation and the highest priority effort in the Forest Service Southwestern Region. The 1st 4FRI Environmental Impact Statement was completed in April 2015. It analyzed approximately a million acres and will result in 586,000 acres of restoration activities on the Kaibab and Coconino forests. These restoration activities include a mix of thinning and prescribed fire treatments. Other work to be accomplished includes the following:

- 170 miles of road work such as construction, relocation, and rehabilitation
- 860 miles of decommissioning unauthorized and closed routes
- Spring and stream channel restoration
- 1,471 acres of aspen restoration
- 56,123 acres of grassland restoration
- Construction of flumes, weather stations, and associated instrumentation to support the paired watershed research study

Four Forest Restoration Initiative volume harvested – **18,424 ccf**

(The measurement ccf refers to 100 cubic feet.)

Archaeologist honored with statewide award

A Kaibab National Forest archaeologist was recognized with a prestigious statewide award in public archaeology by the Arizona Governor's Archaeology Advisory Commission.

Neil Weintraub, zone archaeologist for the Williams and Tusayan ranger districts, was named the 2015 "Professional Archaeologist" of the year by the commission for his significant contributions to the protection and preservation of, and education about, Arizona's non-renewable archaeological resources.

"Neil's commitment to public archaeology and education goes way beyond what is required of a federal archaeologist," said Ann Howard, deputy state historic preservation officer and the person who nominated Weintraub for the award. "His dedication, commitment and enjoyment of sharing the stewardship message and ethic with the public make him stand out."

Weintraub has been an archaeologist with Kaibab National Forest for 25 years. As part of his duties, he surveys national forest lands for cultural resources, identifies and documents the sites that are discovered, and then ensures they are monitored and protected.

The Kaibab National Forest is particularly rich in historically and culturally significant resources, with more than 10,000 archaeological sites recorded on the forest. These historic properties, which Weintraub has helped locate and manage over his quarter-century-long tenure, are related to a long history of human occupation and use of the Kaibab National Forest dating back at least 12,000 years.

But it was for much more than his standard job duties that Weintraub was singled out by the Arizona Governor's Archaeology Advisory Commission for excellence. Weintraub provides dozens of outreach and interpretive programs annually, reaching hundreds of people, including children, with his stewardship message. He also oversees many of Kaibab National Forest's volunteer partners including Grinnell College interns, Arizona Site Stewards, rock art researchers, Passport in Time participants, and individual volunteers, who contribute thousands of hours each year toward the management, protection, documentation and interpretation of heritage resources across the forest.

"Given our challenging multiple use mission, protecting and preserving these sites would be nearly impossible if it were not for the relationships and mutual trust that have been built with our partners over many years," Weintraub said. "We have countless examples in which permittees, seasonal employees, volunteers, local residents or others have told us about previously undiscovered sites. We investigate their discoveries by walking the landscape with them and having them help us with archaeological documentation. Forging these relationships has always brought mutual benefits, as I have often learned more from them than they do from me. Most importantly we have all those extra eyes helping us protect and preserve these ancient, fragile places."

Weintraub's contributions go beyond even cultural resource preservation, though, to a broader commitment to community, which Howard made sure to point out in her nomination of him. Specifically, she included Weintraub's long-term work as a volunteer with the northern Arizona's Big Brothers Big Sisters organization. She described how he always finds ways to get the youth involved in the program interested in Arizona's precious past.

"Neil has a never-ceasing enthusiasm for raising the awareness of the citizens of Arizona, especially the children," Howard said. "Making children sensitive to the fragility of our state's non-renewable heritage resources is absolutely critical to the future protection and preservation of Arizona's cultural resources."

Kaibab National Forest partners with Northern Arizona University on wilderness management

Staff members from the Kaibab National Forest partnered with Northern Arizona University students for several wilderness management projects as part of an upper level course taught under the School of Forestry at the university in nearby Flagstaff.

The partnership between the university and local forests has grown over the last 15 years, evolving from guest lectures and small projects to collaborative work efforts that now span multiple years in some cases.

"Before the semester starts we get together and bring project ideas and decide what is best based on the students," said Martha Lee, a professor in the School of Forestry. "Sometimes we carry projects over a single semester. We've had some that have lasted five years."

Kaibab staff members acted as mentors for two specific projects, one of which examined the preservation of Kendrick Mountain Cabin and another which addressed the lack of standardized wilderness training for youth group leaders.

Students researched and developed a plan that not only preserved the historic Kendrick Mountain Cabin but that also protected and was in line with wilderness values, a challenging endeavor according to Lisa Jones, recreation staff officer for the Williams and Tusayan ranger districts of the Kaibab National Forest. "There is a lot you have to take into consideration," she said. "Not only do you have to be familiar with the laws but also different values. There has to be some compromise."

The second project, which developed a standardized curriculum for youth group leaders, was chosen because "there was a need expressed that youth groups aren't prepared when recreating in wilderness areas," explained Lena Hite, rangeland management specialist for the Williams Ranger District. "Critical skills such as understanding terrain, conditions, elevations and general wilderness knowledge are vital."

The students working on the second project created a two-day training curriculum focused on educating group leaders on essential knowledge and skills in wilderness areas. The first day lesson plan focused on the "Leave No Trace" outdoor ethics program as well as first aid and communication. The second day lesson plan addressed location orientation, map reading and contingency planning in the event of bad weather or if someone were to get lost or injured.

"This course is a win-win," Lee said. "Things are getting done when resources and time don't exist, and our students get experience without having to just study from a book or listen to a lecture."

Total biomass from low-value and small-diameter trees used for energy – **29,095 green tons**

Tribal Relations

The Kaibab National Forest takes its name from the Paiute word "Kaivavitsetsi" meaning "mountain lying down." In 2015, the forest continued its work with federally recognized tribes, traditional knowledge keepers, cultural advisors and tribal youth to manage this unique landscape.

Tribes with aboriginal territories and traditional ties to the land now administered by the Kaibab National Forest include the Havasupai Tribe, the Hopi Tribe, the Hualapai Tribe, the Kaibab Band of Paiute Indians, the Navajo Nation, the Yavapai-Prescott Indian Tribe and the Pueblo of Zuni. The Kaibab National Forest shares boundaries with Havasupai and Navajo tribal lands and is in close proximity to numerous tribal communities.

The forest borders the Grand Canyon National Park and is part of a unique cultural landscape of great traditional and cultural value to native people. The Kaibab tribal relations program facilitates open communication with federally recognized tribes and the development of tribal partnerships related to all aspects of forest management.

Key 2015 accomplishments in tribal relations included the following:

- The Kaibab and Hopi Tribe developed a new Memorandum of Understanding to improve consultation protocols and further promote partnership development between the forest and the tribe. The new MOU will be used as a template at the national level of the Forest Service. This was the third MOU that the Kaibab and Hopi Tribe have signed since 1999. The Kaibab is working with five other tribes on the development of similar MOUs.
- The Kaibab repatriated and reburied three sets of human remains with the Kaibab Band of Paiute Indians under the Native American Graves Protection and Repatriation Act. This followed several years of consultation with the Kaibab Band of Paiute Indians, Hopi Tribe, Navajo Nation, San Juan Southern Paiute, and Pueblo of Zuni.
- In 2012, the Kaibab and the Alamo Navajo School Board Inc. began a partnership to conduct restoration work on the forest while providing employment and training for Navajo tribal members. In 2015, the forest and ANSBI executed an agreement to fund this partnership through 2020.
- The Kaibab signed an agreement with the Truxton Canyon Bureau of Indian Affairs office to integrate the Truxton Canyon BIA Dispatch Center into the Williams Interagency Dispatch Center. This integration supports the relationship between the two agencies by creating dispatching efficiencies, decreasing communication gaps, and increasing opportunities to share resources.

- The Kaibab continued to work with tribal representatives to accommodate requests for forest products for traditional uses as well as practical ones including coordinating visits to traditional plant collection areas and providing free post and pole permits for fence reconstruction. The forest also held 12 permit sale days in Cameron, Ariz., for Navajo communities. This resulted in the issuance of permits totaling 437 cords of fuelwood.
- For the fifth year in a row, Hopi tribal biologists assisted Kaibab biologists in surveying for eagles. Hopi biologists are highly skilled in conducting these types of surveys, and their participation in the Kaibab's annual eagle surveys has been invaluable.
- Kaibab employees continued their participation in tribal events to increase outreach and recruitment efforts and to enhance ongoing development of relationships. Kaibab employees also provided numerous presentations and educational opportunities about the tribal relations program to internal and external groups.
- For the second year, the Kaibab and the Hopi Workforce Opportunity and Investment Act Youth Development Program partnered to bring Hopi youth to the North Kaibab Ranger District to conduct service projects and field trips. This ongoing partnership is focused on increasing outreach to Hopi youth regarding the Forest Service mission and careers and on integrating Hopi traditional knowledge into Forest Service management of the land.

Wildlife

South Zone

South Zone wildlife biologists participated in the annual winter eagle survey in Arizona. As in previous years, biologists from the Hopi Tribe and other Kaibab National Forest resource specialists assisted in the effort. This allowed accomplishment of a large number of survey routes in a few days.

Wildlife biologists conducted yearly monitoring for nesting eagles, peregrine falcons, prairie dogs, northern goshawks, Mexican spotted owls, shorebirds, nightjars, and breeding birds. They also participated in a coordinated survey effort with the Coconino National Forest botanist for Arizona bugbane in the Slide Fire area and in areas where populations have experienced disturbance (fire, tornados, stand senescence, etc.).

The wildlife department worked with multiple groups (American Conservation Experience, Youth Conservation Corps, BASIS Flagstaff, Arizona Antelope Foundation) to accomplish tree encroachment thinning in aspen stands (12 acres), clipping of small trees in encroached grasslands (75 acres), fence removal (5 miles), and fence modification to be more wildlife passable (1 mile). BASIS Flagstaff volunteers assisted in construction of 80 PVC toilet vent mesh caps to prevent wildlife from going into and then perishing in these ventilation tubes.

Wildlife biologists prepared specialist reports and provided input for National Environmental Policy Act projects including the Bill Williams Mountain Restoration Project, South Zone Travel Management Revision Project, grassland restoration, and various small projects. They also assisted in the Four Forest Restoration Initiative five year plan for thinning and prescribed fire. Wildlife surveys in these areas are scheduled so that implementation can occur.

Funds from the Arizona Game and Fish Department were used to accomplish wetland reconstruction at Duck Lake. Wetland reconstructionist Tom Biebighauser was hired to educate the Kaibab crew on how to best build and modify the pools to ensure that they can hold water perennially.

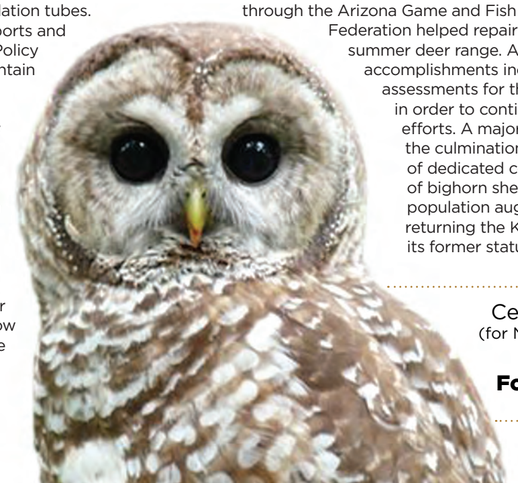
North Zone

Aside from their day-to-day activities like the annual monitoring of wildlife species including the Kaibab squirrel, bats, Mexican spotted owl, northern goshawk and their prey species that reside on the Kaibab Plateau, the North Zone wildlife biologists continued to provide specialist reports and input for National Environmental Policy Act projects on the district, as well as serve as a conduit between the district and cooperating partner agencies.

The wildlife program also became much more involved in rare plant monitoring on the Kaibab Plateau including participating in the preparation of an updated Paradine Plains Cactus Conservation Agreement with the U.S. Fish and Wildlife Service. The conservation agreement lays out management, monitoring, and guidelines for the plant and its habitat to protect it in the future without it having to be listed as a threatened or endangered species.

The wildlife program helped complete surveys of potential habitat for the Kaibab National Forest's only threatened or endangered plant, the Fickeisen plains cactus. Long-term monitoring was established to keep an eye on the health of the plant's population.

Coordinating with the North Kaibab Ranger District and working through the Arizona Game and Fish Department, the Arizona Wildlife Federation helped repair up to 15 waters on the district's summer deer range. Additional cooperative partnership accomplishments included turkey captures and health assessments for the Kaibab Plateau deer population in order to continue collective management efforts. A major accomplishment, which was the culmination of a long-term effort of dozens of dedicated cooperators, was the capture of bighorn sheep for disease monitoring and population augmentation with the hope of returning the Kanab Creek bighorn sheep herd to its former status.



Ceremonial use firewood
(for Native Americans for traditional and cultural purposes)
Forest total – 126 cords

North Zone

The North Kaibab Ranger District heritage program had a busy and productive year. The program of work included significant accomplishments in site inventory and recording as well as historic preservation efforts.

District staff completed survey on approximately 9,511 acres of forest lands. Heritage staff finalized field surveys for the Raspberry Wildlife Habitat Improvement Project and made substantial progress toward completion of the Burnt Corral environmental analysis area. Additionally, the program administered a survey contract for 1,001 acres of land in the Big Springs vicinity.

Staff also worked with Grand Canyon Trust and the Arizona Game and Fish Department, completing surveys and clearances that allowed these partners to achieve their management goals. The program provided input on a proposal by the Arizona Caving Grotto for cave management guidelines for caves located on the Kaibab National Forest, a collaboration that is ongoing.

Seventy-five sites were officially recorded during the field season, and 86 previously recorded sites were monitored including 21 priority heritage assets. In addition to documenting and monitoring, conservation measures were undertaken at several sites. Sites were cleared of heavy fuels, helping protect them from potential adverse fire effects. An unauthorized vehicle route that was promoting damage to a site was also closed and the area rehabilitated with the assistance of a Hopi tribal youth group supported by funding from the More Kids in the Woods grant program. Participants donated 168 hours of volunteer time to the project.

Additionally, the North Kaibab heritage program received special funding from the Forest Service Washington Office to undertake historic preservation work at the National Register-listed Jacob Lake Ranger Station, and in Snake Gulch Canyon, home to hundreds of pictograph panels and multiple sites listed on the National Register. The local Fredonia Youth Conservation Corps assisted with work at the cabin. Supplemental grant funding was made available to the Snake Gulch project by Coconino County and the Kaibab Vermilion Cliffs Heritage Alliance, allowing the forest to utilize the services of several contractors who specialized in rock art photography and database development. Both projects will continue during 2016.

The district engaged in an active public outreach effort. Staff conducted various programs for local events and organizations including the Kane County schools, the Amazing Earthfest celebration, and the eSMART (exploring Science, Math and Related Technologies) summer camp for girls at Dixie State University.

The district volunteer program continued to be very productive in 2015. Site steward volunteers monitored two sites, contributing 507 volunteer hours to the district. Longtime steward Bob Dye received an achievement award from the Arizona State Historic Preservation Office for his 25 years of service to the Kaibab. The North Kaibab hosted the 2015 Passport in Time program in the Saddle Mountain Wilderness, recording 50 prehistoric sites and logging 200+ volunteer hours. Volunteer Judy Fair-Spaulding also developed an electronic historic reference database for the district, donating 365 hours to the effort.

South Zone

It was another busy year for South Kaibab zone archaeologists, as their priority projects included Four Forest Restoration Initiative (4FRI) task orders, travel management revision surveys, monitoring and site protection. It was also a very active year for surveying and site protection during wildland fires, as both the Williams and Tusayan districts managed a number of wildfires for multiple objectives during monsoon season.

South Zone archaeologists wrote 36 cultural resource clearance reports to ensure project compliance, surveying 1,912 acres and recording 75 sites. In addition, archaeologists coordinated with contractors who surveyed an additional 2,350 acres in 4FRI areas. At year's end, they coordinated with contractors to begin survey on 3,500 acres across the Tusayan Ranger District within 4FRI task order areas.

Archaeologists completed cultural and tribal specialist reports on important zone projects including the South Zone Travel Management Revision Project and the Bill Williams Mountain Restoration Project.

During both wildfires managed for multiple objectives and wildfires with a full suppression strategy, archaeologists worked to identify, record and protect 39 previously undocumented, fire sensitive, historic Navajo sites. And, they worked with the Navajo tribal liaison to identify historic Navajo sweat lodges, hogans and sheep pens near the boundary between the Kaibab National Forest and the Navajo Nation. Later in the year, volunteers Ross and Maiya Gralia returned to record many of these sites.

South Zone archaeologists conducted 38 educational outreach programs for local school groups, Forest Service employees and the public, reaching nearly 2,350 people. They also managed 589 hours of volunteer work by Grinnell College intern Toni Androski; Arizona Site Steward volunteers; and Ross and Maiya Gralia, who spent a week recording sites in the Upper Basin of the Tusayan Ranger District.

Archaeologists worked alongside Youth Conservation Corps and Coconino Rural Environment Corps crews to clear several historic logging railroads of hazardous fuels in order to protect them in the event of future wildfires. Also with students, they continued a GPS mapping project of the Overland Road Historic Route, covering an additional 10 miles over the year. Finally, they removed dozens of fire rings from six sites in the Upper Basin and scattered brush at entrances to several closed roads where cultural resource damage was occurring.

Lands and realty management

The lands and realty management program secures and protects the American public's rights, title, value, and interests in its national forests and grasslands and authorizes a variety of uses on those lands to meet the needs of present and future generations.

Lands and realty management is carried out through four major activities:

- Landownership adjustment
- Special use authorizations and administration
- Boundary and title management
- Valuation

Key 2015 lands and realty management work on the Kaibab included the following:

- 1 active land exchange.
- 1 active land sale.
- 4 communication sites inspected.
- 4 expired permit reissues.
- 10 new special use permits/leases.
- 33.50 miles of survey and boundary marking.
- 12 trespass/encroachment cases documented; 2 resolved.
- 1 Small Tracts Act completed.
- 3 communication site management plans updated and finalized; 5 in draft.

Range and livestock grazing management

- A total of 10,235 acres was improved in terms of range vegetation conditions in 2015. This exceeded the forest target of 4,250 acres and was the result of the efforts and projects of all resource areas on the forest.
- The forest administrated 31 grazing allotments accounting for 602,158 acres during the 2015 grazing year. Forage production was good in 2015 with consistent forage-producing moisture in most areas. The good spring rains and monsoon season resulted in excellent production of cool season grasses that provide necessary ground cover to prevent soil erosion and sediment delivery to stream channels.
- Continued to develop and implement a joint research and stewardship program on the North Kaibab Ranger District with multiple partners including the Grand Canyon Trust. This research included establishing Southwest Experimental Garden Array common garden sites for climate change monitoring; setting up livestock exclosures and enclosures; monitoring deer diet quality; green- and brown-stripping cheatgrass dominated areas; completing "Firescape" modeling; experimenting with seed coating and seed planting; and testing soil change related to cheatgrass. This work will be used for forest management throughout the Southwest for years into the future.

Invasive species

- Exceeded the forest target of invasive weed treatment for the year by treating 2,001 acres, which was 391 acres more than expected.
- Once again treated 60 acres of Russian olive within Kanab Creek Wilderness on the North Kaibab Ranger District. This involved bark chopping and spraying herbicide in this remote and unique perennial stream area in order to remove the invasive plant.
- Worked with new techniques to control various invasive species including brown stripping, new herbicide blends, and innovative spraying techniques.

Watershed management and restoration

- A total of 25,278 acres was improved in terms of watershed and soil conditions in 2015. This exceeded the forest target of 19,226 acres and was the result of the efforts and projects of all resource areas on the forest.
- The agra-axe pinyon-juniper grassland maintenance program continued to be a big success. About 2,900 acres were treated on the Williams Ranger District during the year. A partnership with the Arizona Game and Fish Department has helped make this important work and its benefits to the watershed possible.
- As part of the new Forest Service National Best Management Practices Monitoring Implementation and Effectiveness Program, the Kaibab monitored BMP implementation on eight different projects. The BMPs monitored included chemical uses, mining, facilities management, recreation facilities management, road maintenance, managed wildfire, ground-based timber harvest, and range management.
- In addition to BMP monitoring, other projects were monitored throughout the forest. This included project implementation monitoring where the project administrator documented the protection of stream courses, road maintenance, road closures, road obliteration, skidding practices, and slash disposal.
- In situ water quality monitoring was conducted at recreational lakes on the forest including Cataract Lake, Dogtown Reservoir, Kaibab Lake, and White Horse Lake pre-monsoon 2015. The entire water column was monitored at each lake in 1 meter intervals from the lakebed to the surface. Water quality parameters monitored included temperature, pH, specific conductance, turbidity, total dissolved solids, dissolved oxygen, and oxidation-reduction potential. Water transparency was monitored at each of these reservoirs using a Secchi disk. No indications of impairment of water quality were recorded. This data was provided to the Arizona Department of Water Resources.
- Assisted in the development of the Kanab Watershed Coordinated Resource Management Plan of northern Arizona and southern Utah. This plan has provided coordinated direction and the ability to leverage money to complete watershed improvement projects with a great number of partners including the Arizona Department of Water Resources, Bureau of Land Management, Arizona State Land Department, Arizona Game and Fish Department, Town of Fredonia, Kaibab Band of Paiute Indians, Kane County, Garfield County, and other Utah government agencies.
- Provided funding and technical support to the Spring Stewardship Institute to complete spring survey monitoring reports for about 75 springs on the Kaibab. This will be valuable data for upcoming work.
- Coordinated spring restoration/rehabilitation projects for Big Spring and Castle Spring on the North Kaibab Ranger District in cooperation with Hopi tribal elders. The spring restoration projects included use of Hopi traditional ecological knowledge to increase water storage at Castle Spring and improve spring habitat by excluding livestock from the spring source, treatment (hand pulling) of invasive weeds, and trail stabilization at Big Spring.
- Coordinated with Northern Arizona University, Ecological Restoration Institute and Salt River Project on a paired watershed study. Flowtography sites were installed in 2013 and installation of eight precipitation gauges was recently completed in the Sycamore Creek watershed.
- Led a groundwater vulnerability assessment of the forest as a pilot project with the Forest Service Washington Office. This assessment included a review of existing groundwater information and field verification of hydrogeological conditions and was coordinated with Grand Canyon National Park, United States Geological Survey, and Northern Arizona University.

Visitor center hosts "Kaibab National Forest, A Historic Snap Shot" display

The Williams Visitor Center hosted a showing of historical images, maps and documents of the Kaibab National Forest from the late 1880s to 1960 as part of the "Kaibab National Forest, A Historic Snap Shot" visual display, which was available for public viewing for the first several months of 2016.

This photo and map display represented the historic evolution of public land from the early Grand Canyon Forest Reserve to the Grand Canyon Monument, the Tusayan National Forest, and then eventually the Kaibab National Forest. The photos, which were taken on both sides of the Grand Canyon, were a representative sample of historic activities and places on the national forest. The maps showed a stark contrast in boundaries from the early forest reserve to the 1949 version of the Kaibab National Forest.

"The historic development of the Kaibab National Forest has played a significant role in the overall history of the City of Williams and our surrounding communities. But few have looked at local history from the perspective of the Forest Service," said Margaret Hangan, heritage program manager for the Kaibab National Forest. "Therefore, the emphasis of this display is to show how the identity and function of the Kaibab National Forest have shaped our region using the forest's own historic photos and maps to tell the story."

In 2009, the Kaibab National Forest and Williams Public Library formed a partnership to preserve historic images and documents of the City of Williams and the surrounding area. To date there are more than 2,464 photos, documents and oral histories in the collection, and new collections are always being identified. The collection boasts items representing iconic places and themes such as "the Mother Road" Route 66, cattle and sheep ranching, logging and the timber industry, railroads and more. In 2012, 127 of the collection's images were posted online as part of the Arizona Memory Project.

The collection, which is entirely digital, is stored on a computer dedicated to the project at the Williams library and is made available to the public free of charge. The purpose of the project is to preserve these precious treasures of the past and to make them available to the public for historic research. Hangan and Williams Public Library director Andrea Dunn have led the multi-year effort to create what is now an indispensable resource for learning about the history of the local area.

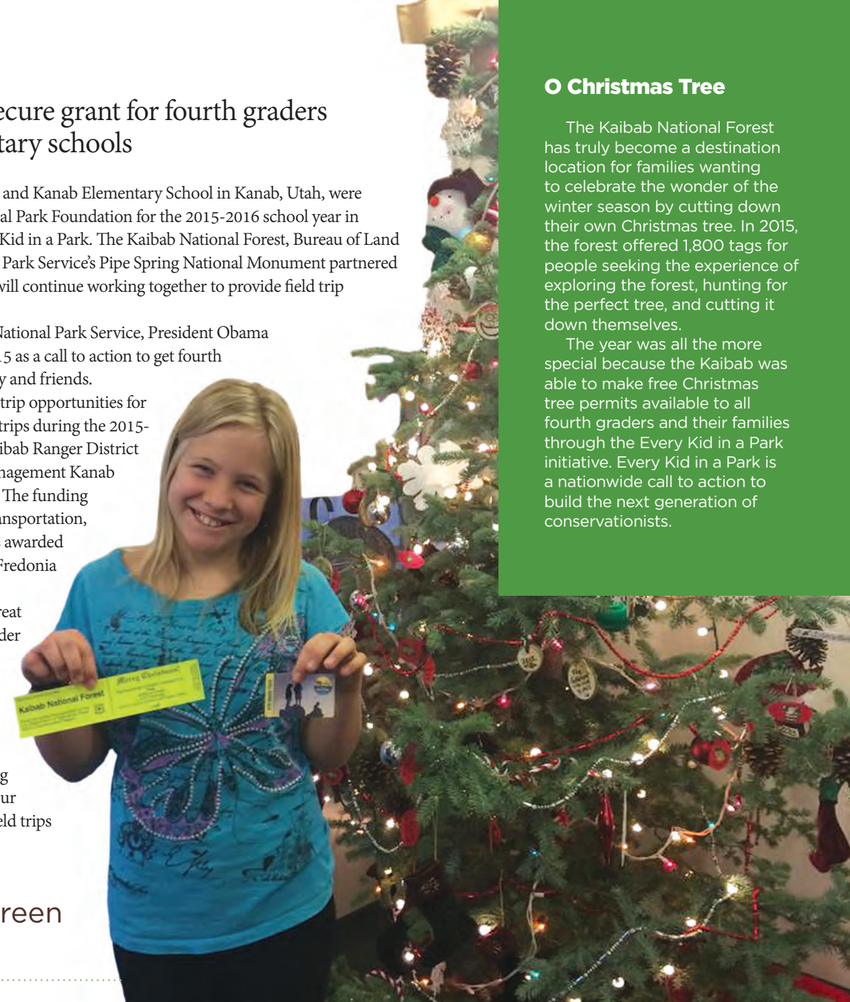
Kaibab National Forest helps secure grant for fourth graders at Fredonia and Kanab elementary schools

Fredonia Elementary School in Fredonia, Ariz., and Kanab Elementary School in Kanab, Utah, were selected to receive field trip grants from the National Park Foundation for the 2015-2016 school year in support of the White House youth initiative Every Kid in a Park. The Kaibab National Forest, Bureau of Land Management Kanab Field Office, and the National Park Service's Pipe Spring National Monument partnered together to generate support for the program and will continue working together to provide field trip opportunities for the students.

Leading up to this year's 100th birthday of the National Park Service, President Obama announced the Every Kid in a Park initiative in 2015 as a call to action to get fourth graders outdoors spending time with nature, family and friends.

Specifically, the grant funding will provide field trip opportunities for each fourth grade class to participate in three field trips during the 2015-2016 school year, one each hosted by the North Kaibab Ranger District of the Kaibab National Forest, Bureau of Land Management Kanab Field Office, and Pipe Spring National Monument. The funding will be used to provide schools with funding for transportation, learning materials and meals. A total of $3,700 was awarded to the Kanab fourth-grade class and $9,000 to the Fredonia fourth-grade class.

"The Every Kid in a Park program has been a great benefit for our students, especially when you consider our location," said Fredonia Elementary School Principal Joe B. Wright. "Being surrounded by multiple parks and forests, this program provides even greater accessibility for our fourth graders and their families. We sincerely appreciate the federal employees who have spent time working cooperatively with Fredonia Elementary School. Our students are very excited about the grant funded field trips that will be coming up in the next few months."



O Christmas Tree

The Kaibab National Forest has truly become a destination location for families wanting to celebrate the wonder of the winter season by cutting down their own Christmas tree. In 2015, the forest offered 1,800 tags for people seeking the experience of exploring the forest, hunting for the perfect tree, and cutting it down themselves.

The year was all the more special because the Kaibab was able to make free Christmas tree permits available to all fourth graders and their families through the Every Kid in a Park initiative. Every Kid in a Park is a nationwide call to action to build the next generation of conservationists.

Bushels of commercial green seed cones sold – **600**

Tourism industry volunteers support Williams Ranger District

Professionals from the tourism industry across the United States joined staff from the Williams Ranger District to complete three projects across the district as part of a volunteer effort.

The work included a restoration project at McDougal Flat in which volunteers trimmed smaller ponderosa pines as part of a larger grassland restoration project to restore habitat and benefit wildlife species such as pronghorn antelope, mule and white-tailed deer, and elk. Other animals that benefit from the restoration work completed include birds and hawks. Other volunteers participated in painting and repairing recreation and information signs. Finally, district employees received assistance in marking portions of the Bill Williams Mountain trail system with reflective markers to assist trail users.

"As an agency, we greatly appreciate the enthusiasm and willingness of our volunteers," said Lisa Jones, recreation manager for the Williams and Tusayan ranger districts. "Because of the efforts of volunteers, we are often able to accomplish projects that would otherwise not get completed."

May your trails be crooked, winding, lonesome, dangerous, leading to the most amazing view. May your mountains rise into and above the clouds.

– EDWARD ABBEY, AUTHOR

Aspen restoration accomplishments on the Williams Ranger District

- Aspen fence building – 5 acres
- Aspen planting – 18 acres
- Aspen release – 298 acres
  (aspen release involves removing small conifers within aspen sites to stimulate growth)

Partners team with Kaibab National Forest on critical aspen restoration effort

The Salt River Project and National Forest Foundation are helping the Kaibab restore imperiled aspen forests by providing support for important conservation and restoration work.

Aspens provide particularly high ecological value and diversity, but these important biodiversity hotspots have declined in recent years due to competition from ponderosa pine, browsing damage from elk and deer, and fire exclusion. To improve the health of these important ecosystems, the National Forest Foundation and the Kaibab National Forest have partnered on an ambitious two-year, comprehensive aspen restoration project across 200 acres of the forest.

With funding from the Salt River Project, the foundation and forest are constructing temporary fencing to exclude elk and deer, which allows aspen forests to regenerate. Additionally, the partners are planting young aspen seedlings to expedite aspen stand restoration. The project is expected to regenerate approximately 200,000 aspen seedlings.

Stewardship contracts awarded – **2,942 ccf**
(The measurement ccf refers to 100 cubic feet.)

Soil scientist receives national-level awards for watershed resources work

Kaibab National Forest's soil scientist was one of several recipients of two national-level Forest Service awards recognizing collaborative efforts in aquatic resource management.

Kit MacDonald, who has been the Kaibab's soil scientist since 2010, was one of several team members selected for the "National Rise to the Future" award in Collaborative/Integrative Aquatic Stewardship and the 2015 Chief's Honor Award for Sustaining Forests and Grasslands. Specifically, the team pioneered the first and only nationally consistent, comprehensive approach to Best Management Practices for the diverse range of ground-disturbing activities that occur on National Forest System lands. BMPs are land management practices designed to reduce or eliminate the introduction of pollutants to water bodies such as streams, lakes and wetlands.

"Kit provided tremendous contributions to the National BMP Program," said Pamela Edwards, a research hydrologist for the Forest Service Northern Research Station and a leader in the agency's efforts to establish a national approach to responding to water quality concerns. "He was involved in a huge amount of support for the program in many areas but especially in providing BMP monitoring training to field units. He was a great asset and brought a lot of on-the-ground experience from which we could draw."

The National BMP Program that the team developed includes a framework for using an interdisciplinary process to identify needed BMP prescriptions during project planning. The framework also includes a systematic approach to monitoring the implementation and effectiveness of those prescriptions to protect water quality.

The program has improved performance, accountability, consistency and efficiency in protecting water quality and aquatic resources. It is helping the Forest Service meet its stewardship objective of providing abundant, clean water to meet the needs of the public and ecosystems.

"Best Management Practices have been an important part of my career as a soil scientist for many years. Maintaining soil productivity through prevention of erosion and contamination, and protecting water quality during land disturbing activities are among my core values as a steward of soils and watershed resources," MacDonald said. "The Forest Service is recognized nationally and internationally for excellence in stewardship of land and aquatic resources. It is truly an honor to be acknowledged by the Forest Service for my contribution to what I feel is world-renowned stewardship of public lands."

Reforestation efforts continue on North Kaibab Ranger District

The North Kaibab Ranger District successfully replanted another 485 acres of ponderosa pine seedlings in an area that was severely burned by the 2006 Warm Fire.

Crews replanted approximately 100,000 seedlings, made possible in part by a $12,200 grant from the American Forests' Global ReLeaf program, which is dedicated to restoring forest ecosystems.

"This is a multi-phase reforestation effort with many facets that must be accomplished," said North Kaibab District Ranger Randall Walker. "Seeds must be harvested, grown, and the area salvage logged before any seedlings actually go in the ground."

Salvage logging this project area and then replanting has been a high priority for the North Kaibab Ranger District. Logging the salvageable wood reduces the volume of potential fuel loads on the ground that could pose a wildfire re-burn risk.

In addition to salvage logging, seeds must be harvested. Seeds for this reforestation effort were harvested from the Kaibab Plateau in 2009, grown at the Cal Forestry Nursery in northern California, and returned to the North Kaibab and stored in a large cooler where they were kept frozen until conditions favored their survivability.

"These replanting efforts are crucial to helping speed the recovery of this project area by reestablishing the native trees and creating a seed source for natural regeneration," said Garry Domis, silviculturist for the North Kaibab Ranger District.

Reforestation efforts also help to stabilize sensitive soils, reduce erosion and provide improved habitat for wildlife, according to Domis.

To date, more than 5,000 acres have been reforested since this recovery project began and more than one million ponderosa pine and Douglas fir seedlings have been replanted.

Over the last several years, the reforestation effort has been made possible through grants provided by the National Forest Foundation, American Forest Foundation, Salt River Project Trees for Change program, and the National Bank of Arizona's Sustainable Initiatives program.

Military veterans help North Kaibab employees give trails a facelift

Recreation staff members of the North Kaibab Ranger District of the Kaibab National Forest partnered with the Arizona Wilderness Coalition and military veteran volunteers to maintain trails within and near the Saddle Mountain Wilderness.

"For my veteran brothers and sisters, this trip was a good chance to push reality and stress aside and enjoy one of this country's treasures, meet other veterans and make some new friends," said U.S. Army veteran Bill Losh.

During the Saddle Mountain Wilderness project, Arizona Wilderness Coalition coordinator Brian Stultz and North Kaibab Ranger District coordinator Denise Carpenter jointly hosted U.S. military veteran volunteers for three days of trail maintenance and hiking followed by four nights of rest and relaxation, campfire bonding, and evening dinners consisting of burgers, pastas, fresh salads and three much-loved Dutch oven entrees cooked by Stultz.

"The cord is cut," said Mind, Body and Resilience trainer Nick Manci, who instructed yoga and trauma release classes throughout the week. "I felt a disconnect to my world back in Phoenix. My time in the forest with no communication with anyone outside of our camp and the trail time, yoga, trauma release and meditation all played a role in my reemerging with nature. I'm once again reminded of where I've come from and where to find solace and peace."

"I especially enjoyed the beauty and quiet seclusion of the wilderness," said U.S. Marine Corps veteran John Morgan. "There was nothing but friendly and professional folks running this program and plenty of time to myself. I think the volunteer program is a major plus and would do it again if asked."

Throughout the week, volunteers camped alongside Forest Service Road 611 just a few miles from the trailheads. Each day, the crew started with morning yoga, breakfast and a short hike before the work of cutting trees and trail brushing began.

"I have shed a lot of military skin in the eight years since I got out," said U.S. Marine Corps veteran Jeff Glessing. "Reconnecting with veterans who get it was a great treat for the weekend. We were able to speak freely about our experiences, connect over common ground and speak in acronym-filled sentences without having to decipher it for our audience."

Throughout the days, the veteran crew worked alongside North Kaibab Ranger District and Arizona Wilderness Coalition personnel. All told, they improved about 3.5 miles of the North Canyon Trail, clearing a wide corridor to accommodate pack horses, and an additional 1.6 miles of the Saddle Mountain Trail. All maintenance work was done with hand tools such as the crosscut saw, bow saw, pruning saw, grub hoe and loppers. Motorized equipment is prohibited in areas designated as wilderness.

"It's kind of like performing plastic surgery for the trails," said Carpenter, a seasoned and certified crosscut sawyer. "Trail work requires various kinds of hand tools and, to be safe and productive, trail workers must know how to select the best tools for the job and be skilled at using them. Productive trail work depends upon knowing your way around sharp tools, working together as a team and having a constant awareness of surrounding hazards, and this crew did remarkably well for it being their first time doing this type of work together."

"This past two years I have worked as a mentor to the grants management trainee on the Coconino National Forest. In December, the trainee received her certification. The whole grants management community in Arizona works so well together as a team. We help each other out when on leave, fire assignments, and with workload. Working as a very cohesive team gives us the ability to ask important questions and to see another perspective." **Susan Brown, Grants Management Specialist • Kaibab Supervisor's Office**

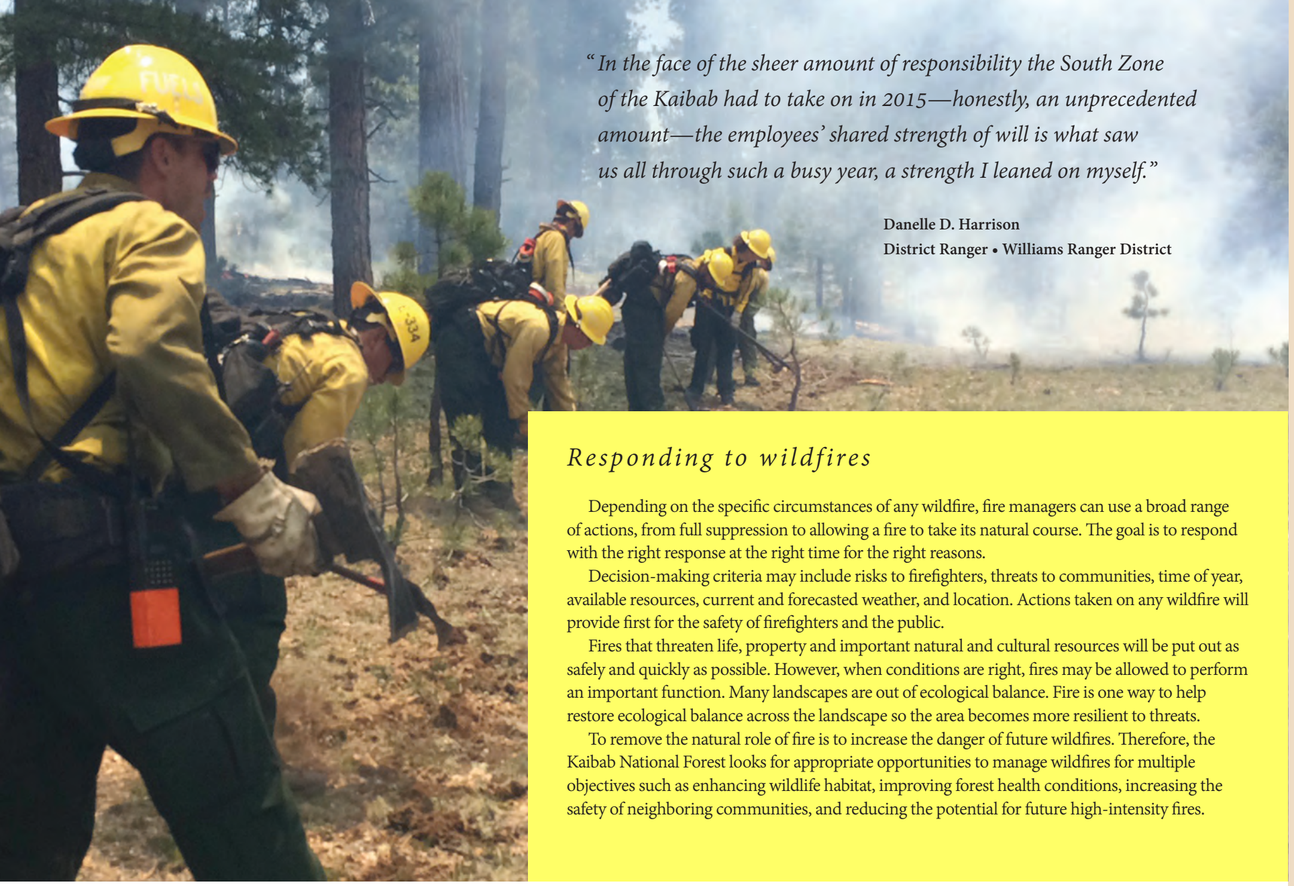
Engineering

Notable successes during 2015 included the following:

- Issued and administered numerous road maintenance permits to other government agencies and private entities.
- 2.04 miles of road spot surfacing and reconditioning along with the installation of four large culverts on forest roads 423 and 234 on the North Kaibab Ranger District to reduce the risks of flood damage.
- North Kaibab Ranger District road maintenance contract work was performed; 101.4 miles of Maintenance Level (ML) 3 roads and 77.4 miles of ML 2 roads were maintained.
- Road crew maintenance of 178.1 miles of ML 3 roads and 124.9 miles of ML 2 roads across the forest.
- Installed critical warning and safety signage on major ML 3 roads on the Williams Ranger District.
- Maintained and repaired cattle guards across the forest.
- Awarded contracts to crush and stockpile 42,000 tons of road resurfacing aggregate at Dillman Pit on the Williams Ranger District.
- Continued surveying and data analysis work to reduce risks to public safety and minimize potential downstream flood damage by modifying Railroad Tank Dam on the Williams Ranger District.
- Awarded contracts for a number of facilities maintenance, replacement and demolition projects across the forest.
- Awarded contracts for the installation of new energy efficient lighting fixtures, energy efficient heating, ventilation and air conditioning systems at various forest offices and work centers.
- Awarded a contract for the installation of new water meters forestwide.
- Completed the waterline improvements contract for Jacob Lake Work Center on the North Kaibab Ranger District.

"Reflecting over the past year, there are many things that inspire me but more than any is the dedication, hard work and perseverance of our employees here on the Kaibab. This forest has exceptional people to work with and for to achieve our common goals."

Josh Miller, Assistant Fire Management Officer
Tusayan Ranger District



"In the face of the sheer amount of responsibility the South Zone of the Kaibab had to take on in 2015—honestly, an unprecedented amount—the employees' shared strength of will is what saw us all through such a busy year, a strength I leaned on myself."

Danelle D. Harrison
District Ranger • Williams Ranger District

Responding to wildfires

Depending on the specific circumstances of any wildfire, fire managers can use a broad range of actions, from full suppression to allowing a fire to take its natural course. The goal is to respond with the right response at the right time for the right reasons.

Decision-making criteria may include risks to firefighters, threats to communities, time of year, available resources, current and forecasted weather, and location. Actions taken on any wildfire will provide first for the safety of firefighters and the public.

Fires that threaten life, property and important natural and cultural resources will be put out as safely and quickly as possible. However, when conditions are right, fires may be allowed to perform an important function. Many landscapes are out of ecological balance. Fire is one way to help restore ecological balance across the landscape so the area becomes more resilient to threats.

To remove the natural role of fire is to increase the danger of future wildfires. Therefore, the Kaibab National Forest looks for appropriate opportunities to manage wildfires for multiple objectives such as enhancing wildlife habitat, improving forest health conditions, increasing the safety of neighboring communities, and reducing the potential for future high-intensity fires.

Fire and Fuels Management

Precipitation

- Precipitation in the 2015 water year (Oct. 1, 2014, to Sept. 30, 2015) started out deficit. Precipitation in March and April helped bring totals up. Then, May and June were historic in their amounts of precipitation, at 477 percent and 465 percent of average respectively. Overall, this brought totals up to about 130 percent of average, which was maintained by an above average period from July through September.
- Total precipitation on the Kaibab was 19.02 inches, which was 4.38 inches over the average of 14.64 inches.
- The 2015 monsoon was 142 percent of average at 8.89 inches compared to 6.25 inches.

Wildfires

- There were 103 wildfire starts on the Kaibab in 2015; 91 were lightning caused and the other 12 were human caused. This was up from last year's historic low of 75 starts, 63 lightning caused and 12 human caused.
- The 2015 fire occurrence on the Kaibab was 15 percent below the 10-year average of 119.8 starts per year and 47 percent below the 45-year average of 191.7 starts per year.
- There were a total of 21,551.2 acres burned by wildfires on the Kaibab in 2015.
- Of the acres burned in wildfires in 2015, 21,111 acres (98 percent) were from wildfires managed for multiple objectives with only 440.3 acres (2 percent) from suppression fires.
- Of the 440.3 acres burned by wildfires with a suppression strategy, 99.1 acres were lighning caused and 341.2 acres were human caused.
- Only one suppression fire grew larger than 100 acres. The Dream Fire on the Williams Ranger District grew to 340 acres in late November. This fire was wind driven and in fine fuels and contributed 99.6 percent of the total human caused suppression acres and 77 percent of all suppression acres in 2015.

Wildfires managed for multiple objectives

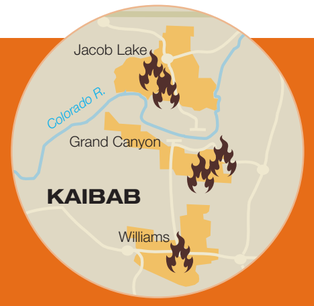
- A total of 10 wildfires were managed for multiple objectives. Two of these fires were managed individually – Locust and Springs. The other eight were managed as part of complexes – Jar Complex (4 fires), Burnt Complex (2 fires), and Rock (2 fires).
- The 21,111 acres of wildfire managed for multiple objectives in 2015 were the third largest number of acres managed for that purpose since 2003 when the program began on the Kaibab. This was 54 percent higher than the Kaibab's 10-year average of 13,691.5 acres. A total of 164,613.5 acres has been successfully managed for multiple objectives on the Kaibab since 2003.

Wildfire cost

- The total cost of wildfires in 2015 on the Kaibab was $2,541,878.48. Of that, $2,074,439.03 (82 percent) was spent on wildfires managed for multiple objectives. The other $467,439.45 (18 percent) was spent on wildfires with a suppression strategy.
- The average cost for a wildfire managed for multiple objectives on the Kaibab in 2015 was $98.26 per acre. It was $1,062.12 per acre for suppression fires.
- The average cost per acre of a wildfire managed for multiple objectives in 2015 was 10 times less than that for a wildfire with a suppression strategy.

Prescribed fire

- Prescribed fire treatments in 2015 reached historic levels. The Kaibab treated 16,382 acres with prescribed fire, which was 204 percent of the 10-year average of 8,016.9 acres. This was the largest prescribed fire year ever on the Kaibab and was 3,144 acres more than the previous largest prescribed fire year in 2005.



2015 wildfires managed for multiple objectives

LOCUST
North Kaibab Ranger District
ACRES: 3,227
START: June 15 **CONTAINMENT:** Aug. 19

JAR COMPLEX
Tusayan Ranger District
ACRES: 4,362
START: June 29 **CONTAINMENT:** July 20

SPRINGS FIRE
Williams Ranger District
ACRES: 7,111
START: July 2 **CONTAINMENT:** Aug. 25

BURNT COMPLEX
North Kaibab Ranger District
ACRES: 3,914
START: July 5 **CONTAINMENT:** Aug. 19

ROCK
Tusayan Ranger District
ACRES:: 2,497
START: July 31 **CONTAINMENT:** Aug. 19

Total acres = 21,111

Northern Arizona land managers recognized for leadership in fire management

Managers of both the Kaibab National Forest and Grand Canyon National Park were recognized for the leadership role they've played in managing wildland fire across the landscape and jurisdictional boundaries for the purpose of improving forest health conditions.

From the Kaibab National Forest, former Forest Supervisor Mike Williams, North Kaibab District Ranger Randall Walker, former Tusayan District Ranger James Simino, and Williams District Ranger Danelle D. Harrison were honored with the "Excellence in Line Officer Commitment to Restoration of Fire Adapted Ecosystems" award by the Forest Service National Line Officers Team. The group award recognizes the efforts made by the leadership of the Kaibab National Forest in the restoration of forest ecosystems through the use of a variety of tools including wildfire, prescribed fire, and manual and mechanical fuel treatments.

"This group award represents well-deserved, national-level recognition of the significant work accomplished on a landscape scale by these line officers and by all the employees of the Kaibab National Forest," said Art Gonzales, fire staff officer for the Kaibab. "These individuals have provided an unwavering level of support that has allowed the Kaibab National Forest and its employees to be national leaders in restoring fire-adapted ecosystems."

From Grand Canyon National Park, Superintendent Dave Uberuaga was the recipient of the "Superintendent Fire Management Achievement Award" from the Intermountain Region of the National Park Service. The award is given annually to an Intermountain Region park superintendent who actively supports and is fully engaged with their unit's fire management program.

Not only do Kaibab National Forest and Grand Canyon National Park share borders both north and south of the canyon, but the managers of each share a commitment to restoring fire-adapted ecosystems on a landscape scale and providing the leadership necessary to accomplish that important work.

The forest and park work together daily across jurisdictional boundaries on a variety of projects and even share a fire management organization on the north side. The North Zone Fire Management organization includes personnel from both the North Kaibab Ranger District of the Kaibab National Forest and the North Rim of Grand Canyon National Park.

"Managing fire on a landscape scale and across administrative boundaries is key to building resiliency throughout the ecosystem," said North Kaibab District Ranger Randall Walker, who was one of the recipients of the Forest Service award. "Together, we can maintain and build resilient landscapes; help protect the public, nearby communities and important infrastructure; and create a safe, effective and appropriate response to wildfire."

"Here at Tusayan, we have achieved something that I believe will go down in history. We have been able to utilize the tools available to us to enhance, stimulate, and create a much more resilient environment. The results are self-evident and, from what I can tell, we have inspired many others to follow suit. We have undoubtedly created a much safer and healthier forest for the long term. It is our job to guarantee sustainability for future generations, and I believe we have accomplished that goal in our lifetime. The fact that we have eliminated human caused fire on this district for a measurable period of time is a monumental achievement that makes me feel very proud to have been part of this team on the Kaibab National Forest. 'Caring for the land and serving people.' Yes, we can do that!" – **Bob Blasi, Fire Prevention Specialist • Tusayan Ranger District**

Video explains importance of wildland fire in ecosystems of northern Arizona

In late 2015, the Kaibab National Forest released an informational video explaining the importance of wildland fire in the ecosystems of northern Arizona from the perspectives of various natural and cultural resource specialists.

Over the last decade, the Kaibab has managed both wildfire and prescribed fire to treat approximately 300,000 acres for a variety of objectives. That work wouldn't have been possible without employees from all program areas actively engaging in the management of fire across the landscape, according to Kaibab fire staff officer Art Gonzales. Because of those ongoing efforts, Gonzales thought it important to highlight a part of the wildland fire world that most people never get to see.

"Typically, most fire videos provide a fire management officer, fuels specialist or fire ecologist perspective on why we believe fire across the landscape is essential for a number of reasons," Gonzales said. "I wanted to take this video in a new direction, a direction in which those folks who are often the critical link in a successful program do not remain behind the scenes or go unnoticed. I was looking for a video about fire but from a non-fire perspective."

To that end, Gonzales teamed with the Southwest Fire Science Consortium and producer Josh McDaniel to create a 10-minute video entitled "Keeping Fire on the Ground: Resource Specialist Perspectives on the Kaibab National Forest," which can be viewed at *https://youtu.be/IpFWb5NDyPI*.

"I am hopeful this is a product that can be used to help educate, raise awareness, and highlight the collective efforts necessary to build a successful wildland fire management program," Gonzales said.

"On the Kaibab, we have been fortunate to have past and present employees at all levels of the organization who truly understand fire and who have helped build an extensive history of using wildland fire to achieve benefits to many resource areas across the forest, from protection of the wildland urban interface to ecosystem restoration to cultural and heritage site preservation and more. It is critical that this important work continue, and I hope the video will help spread the word about our efforts."

Rural Communities Fuels Management Partnership

In late 2000, the Kaibab National Forest became a key partner in the organization that would eventually be known as the Rural Communities Fuels Management Partnership. The goal of the partnership was to assist communities and local fire departments in wildland fire mitigation and education.

By implementing tree-thinning treatments on private property, the partnership worked to reduce the threat that wildland fire poses to lives, communities and natural resources. Besides assisting communities with fire mitigation, the Rural Communities Fuels Management Partnership also sought to educate landowners about the importance of working to make one's property more defensible against wildland fire. Through the partnership, property owners were educated about fuels management and their role in it.

After many successful years, the Rural Communities Fuels Management Partnership officially disbanded in 2015. All told, more than 2,700 acres of privately-owned lands were thinned. About 1,760 of those treated acres were on private parcels within or adjacent to the Kaibab National Forest. Private property owners contributed more than 45,000 hours of time to completion of this critical work.

The Rural Communities Fuels Management Partnership also became a template to be replicated in other wildland-urban interface communities threatened by fire and was the recipient of important awards and recognition. The partnership received a 2003 USDA Group Honor Award for Excellence "for exceptional partnership efforts that resulted in the thinning of many acres of private property, reducing the threat that wildland fire poses to local communities."

The partnership was also a recipient of the 2004-2005 national Rural Community Assistance Award in the Leadership Category from the Forest Service.

Partners included the Forest Service, University of Arizona Coconino County Cooperative Extension, Arizona State Forestry Division, Ecological Restoration Institute, Coconino County Public Works and Community Services departments, Summit Fire District, Highlands Fire District, Sherwood Forest Estates Fire District, Ponderosa Fire District, and Blue Ridge Fire District.

Decision signed for Bill Williams Mountain Restoration Project

Williams District Ranger Danelle D. Harrison signed the Record of Decision for the Bill Williams Mountain Restoration Project at the end of 2015. The signing of the decision was the final step in a multi-year planning process aimed at reducing wildfire risk and improving forest health and watershed conditions near the City of Williams. The decision included the following:

- Commercial and non-commercial treatments on approximately 15,200 acres, with follow-up post-mechanical treatments on activity slash. In response to comments, cable logging was no longer included as a harvesting method option. Further, in response to comments, the inclusion of steep-slope ground-based logging equipment as a harvesting method option will allow for a more economically viable project.
- Strategic fuel treatments designed to enhance fire control lines.
- Prescribed fire application to approximately 15,200 acres using a combination of ground-based and aerial firing techniques. This includes maintenance burning over the next 40 years.

"Treating Bill Williams Mountain is a high priority for me and for the other managers of Kaibab National Forest," Harrison said. "We are anxious to begin this important work that will provide protection to the Williams community and its watershed."

Implementation of the Bill Williams Mountain Restoration Project is expected to begin in 2016.

"This is truly a dream fulfilled. So many on the Williams district, across the Kaibab, and beyond have worked diligently to see the Bill Williams Mountain Restoration Project to fruition. That hard work has culminated in a project of which we all can be proud. Working with such a talented group of people to get to this moment has been awe-inspiring." **Danelle D. Harrison, District Ranger • Williams Ranger District**

Williams Ranger District treats almost 3,000 acres with Heritage Grant

The Kaibab National Forest completed treatment of almost 3,000 acres of grassland on the Williams Ranger District using a $50,000 Heritage Grant awarded by the Arizona Game and Fish Department.

Specifically, the Kaibab National Forest used an agra-axe, which is a tree shearing machine, to remove encroaching junipers and other conifers from 2,901 acres of a historic grassland in the far northern corner of the Williams district near White Hill. The purpose of the work was to restore habitat for ferruginous hawks, burrowing owls, golden eagles, Gunnison's prairie dogs and pronghorn antelope.

"This funding was obtained specifically to address non-game species that rely on grassland habitat in northern Arizona," said Justin Schofer, wildlife biologist. "Interest in and funding for grassland restoration for game species has been a longtime, worthwhile and ongoing effort. Through the Heritage Grant program, the Arizona Game and Fish Department has shown its commitment to restoration for non-game species such as hawks, prairie dogs and other wildlife that also rely on grassland habitat."

The agra-axe project involved cutting about 100 to 300 trees per acre in the grassland. Many large trees were retained to provide important foraging perches and suitable nesting habitat for ferruginous hawks and other raptors. Cut trees were often crushed, which improves the line of sight for Gunnison's prairie dogs and other wildlife species. Also, pinyon and juniper trees on rocky hills and outcrops were left, as they historically served as nesting and roosting habitat.

Functioning grasslands are declining across the Southwest due to a variety of factors, which is resulting in loss of wildlife habitat and other negative impacts to ecosystem health. By removing encroaching trees and conducting prescribed burns on a broad scale, forest managers hope to reduce tree densities, reestablish natural fire regimes, and promote grassland-associated wildlife species.

The completed 2,901-acre project complements other work accomplished on the district in recent years as well as future projects being planned to restore historic grasslands. Due to their important ecological role, the Kaibab National Forest has identified restoring grasslands by reducing tree encroachment and restoring fire as a priority in its recently revised Land and Resources Management Plan. Plan objectives include reducing tree density to less than 10 percent on 5,000 to 10,000 acres of historic grasslands annually.

"To see how hard our people worked to help the recovery of Kanab Creek riparian area in the Kanab Creek Wilderness was inspiring. In the last five years, a new section of Kanab Creek is flowing again with perennial water because of the hard work of the North Kaibab Ranger District to remove Russian olive that would eventually have taken over in areas due to a variety of factors. Russian olive removal is extremely difficult in this remote, hot environment. To see how hard our people worked and to see this area recover from invasive species is truly inspiring."

Michael Hannemann, Range, Watershed, Invasive Species, and Rare Plants Program Manager • Supervisor's Office

Timber sale and stewardship contracts volume harvested – **11,364 ccf**

(The measurement ccf refers to 100 cubic feet.)

Wilding permits sold – **163**

Veterans Fire Corps

The Veterans Fire Corps was created to provide U.S. military veterans with an opportunity to gain employment with federal land management agencies. While land management agencies had a desire to hire veterans, the certifications and experience necessary for various positions was often lacking, despite the veterans' military service. To bridge that gap, the VFC was designed to provide education, training and experience at no cost to veterans, enabling them to gain the wildland firefighting credentials needed to gain employment.

In 2011, the Student Conservation Association in partnership with AmeriCorps and in cooperation with the U.S. Forest Service, the Southwest Conservation Corps, and the California Conservation Corps developed the program in order to leverage military veterans' willingness to serve, ability to lead, interest in a wildland firefighting or forestry career, and valuable training and experience gained through successful service in the U.S. Armed Forces and build from there.

The Kaibab National Forest has hosted a VFC crew for the last four fire seasons, with the most recent two of those being on the North Kaibab Ranger District. The majority of the on-the-job experience they've gained has been through working on thinning and fuels reduction projects designed to provide wildfire protection for structures.

"The Forest Service has been a huge proponent of the program because it provides veterans with the training and experience required for these jobs," said SCA program manager Amelyne Major. "Over the years, folks were finding that the veterans applying for these positions weren't necessarily qualified or ready to fill these vacancies despite having successfully served in the military."

Whether having expressed the need to find a new sense of community similar to that experienced in the military or to simply gain new marketable job skills, the most common feedback received from VFC alumni is that the program provides a renewed sense of purpose, a great opportunity for real-world experience, and the ability to network and enjoy a familiar structure and work life with others who've shared similar experiences – an important benefit for some as they transition back to civilian life.

Output totals for Kaibab National Forest VFC from September through December 2015:

- Fuel moisture sample plots – 3
- Brown's transects sample plots – 12
- Fuels reduction/thinning (acres) – 26
- Prescribed fire broadcast burns (acres) – 95
- Prescribed fire slash pile burns (acres) – 527
- Red Card certifications – 3
- S-212 Wildland Chainsaw certifications – 3
- Wilderness First Aid certifications – 4
- Wildfires suppressed – 1

Wildlife biologist recognized for work with partners

The Arizona Game and Fish Department recognized Kaibab National Forest wildlife biologist Roger Joos for his collaborative work with the department on wildlife projects.

"I can't say enough good things about Roger," said Susi MacVean, nongame specialist with the Arizona Game and Fish Department's Region 2 office. "He has worked with every one of our programs – fisheries, habitat, game, and nongame. In every case, everyone has nothing but great things to say about his contributions. He is always enthusiastic, eager to help, and ready to get dirty!"

Joos was presented with his award during the Arizona Game and Fish Department's annual coordination meeting with partner agencies. The certificate cited his "outstanding collaboration with Region 2 on a variety of wildlife projects, and in special recognition of your instrumental role in the restoration of Duck Lake, an important wetland for waterfowl, shorebirds, wading birds, other migratory birds, bats and amphibians."

MacVean pointed out that Joos had spearheaded or assisted with countless wildlife projects beyond Duck Lake, though, including restoring Gunnison's prairie dogs to areas hit hard by plague by trapping nuisance prairie dogs at the Williams Elementary-Middle School and releasing them back into wildland colonies; conducting surveys at wetlands to determine good areas to reintroduce northern leopard frogs; creating fish habitat at several popular fishing lakes; helping with a turkey mortality study; restoring grassland habitats; removing fences to facilitate pronghorn movements; and, monitoring local golden eagle nests to help assess their status statewide.

"The bottom line is we can't get wildlife work done without collaborating," MacVean said. "When we have active and positive partnerships, wildlife and their habitat win big. That is what our partnership with Roger has been all about and why it means so much to all of us at Game and Fish. We look forward to many more collaborative projects."

Forest releases draft decision to add camping corridors and make other improvements to transportation system

The Kaibab National Forest released a draft decision to add camping corridors and make other improvements to the transportation system of the Williams and Tusayan ranger districts.

The project, which was designed to improve travel management on the two districts in response to public and internal feedback, will designate approximately 291 miles of camping corridors that extend 300 feet from either side of the centerline of certain roads; add 14 spur roads to the Tusayan Ranger District; close 9 miles of currently open roads on the two districts; add 24 miles of roads to the districts' open road system; and establish an adaptive management strategy for making limited changes to the transportation system in the future.

Changes to the transportation system included in the draft decision were all developed based on several years of monitoring following implementation of the Travel Management Rule on the two districts, which included documenting public concerns about recreational access and other issues.

"I believe our local community members and our visitors will be pleased with these changes and will recognize that they are responsive to the concerns we've been hearing over recent years," said Williams District Ranger Danelle D. Harrison. "We took our commitment to listen to public and employee feedback seriously, and this decision is evidence of that continuing commitment. Our goal is to provide motorized recreational opportunities where we can while still providing for the protection of our natural and cultural resources."

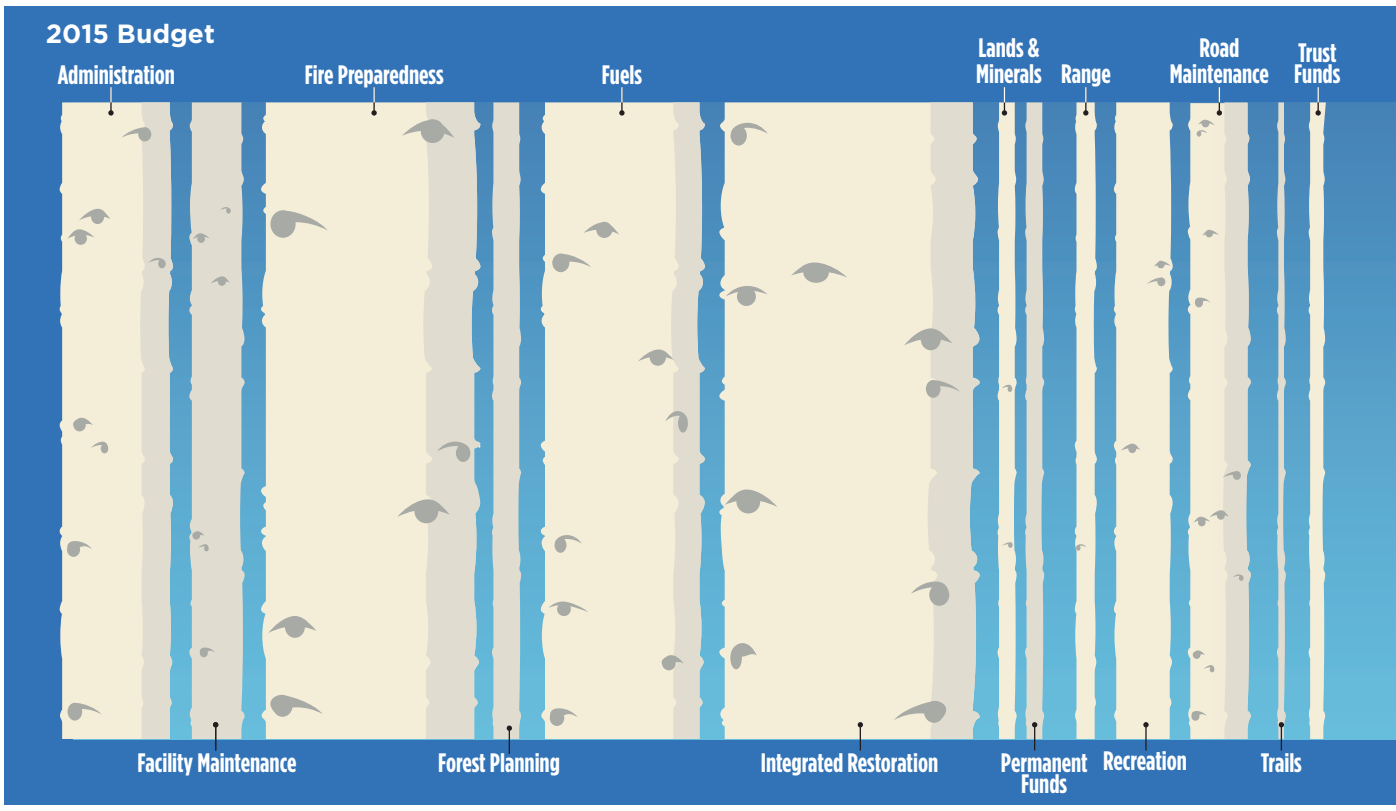
A final decision on the South Zone Travel Management Revision Project is expected in the spring with a new Motor Vehicle Use Map anticipated soon thereafter.

"During my two-day fastpack in Kanab Creek Wilderness last fall, I was in awe at the amazing scenery on the Kaibab. I smiled and thought, 'I'm happy to work for an organization that respects and takes care of this beautiful land. I'm happy to be a part of the Kaibab National Forest family.'"

Paul Grimm, Information Receptionist
North Kaibab Ranger District

But indeed, it is not so much for its beauty that the forest makes a claim upon men's hearts, as for that subtle something, that quality of the air, that emanation from the old trees, that so wonderfully changes and renews a weary spirit.

– Robert Louis Stevenson, author



Heather Provencio selected as new Kaibab National Forest supervisor

In October 2015, the Kaibab National Forest welcomed a new forest supervisor. Heather Provencio, who had most recently served as the deputy forest supervisor on the White River National Forest in Colorado, took over the reins from Mike Williams, who left the Kaibab in May to become the forest supervisor for the Okanogan-Wenatchee National Forest headquartered in Wenatchee, Wash.

"We're excited to have Heather return to the Southwestern Region. She has a people-centered view of the environment that I believe is the proper focus for finding a creative balance that meets the needs of the forest, the surrounding communities and tribes, as well as employees," said Southwestern Regional Forester Cal Joyner. "Heather's strong grounding in northern Arizona will allow her to quickly gather momentum and move ahead on implementing the new Kaibab forest plan, Four Forest Restoration Initiative and fire management programs."

Provencio is no stranger to northern Arizona and its landscape, people, challenges and opportunities, having worked in various jobs on the Coconino National Forest adjacent to the Kaibab from 2001 until 2013, including as the district ranger for the Red Rock Ranger District headquartered in Sedona, Ariz.

"I am excited by the idea of getting back to northern Arizona, which I consider home," Provencio said. "I am also excited by the challenges that I know await me on the Kaibab and the learning and professional growth that those will bring. I am very much looking forward to being part of and leading a cohesive and exceptional team of employees who take on difficult issues and still find time to do critically important work like connecting the public with their national forests."

Provencio was born and raised in southern Illinois and grew up in a Forest Service family. She moved to Arizona in 1982 to attend Northern Arizona University and pursue a bachelor's degree in anthropology with an emphasis in archaeology. Her first job with the Forest Service was in 1985 as a firefighter on the Chevelon Ranger District of the Apache-Sitgreaves National Forests, after which she held a variety of positions in archaeology, recreation and business administration until returning to school to pursue her master's degree in anthropology.

She then held positions as an archaeologist and tribal liaison before becoming a district ranger and, subsequently, a deputy forest supervisor.

"I will strive to be an excellent leader for the employees of the Kaibab and our communities and partners. They deserve nothing less, so I will continually work on improving my skills as a leader," Provencio said. "I hope to create strong connections between our employees, the Forest Service lands we manage, and the public."

Kaibab National Forest Supervisor's Office
Heather Provencio
Forest Supervisor
800 S. 6th Street
Williams, AZ 86046
(928) 635-8200

North Kaibab Ranger District
Randall Walker
District Ranger
430 S. Main Street
P.O. Box 248
Fredonia, AZ 86022
(928) 643-7395

Tusayan Ranger District
Vacant, District Ranger
176 Lincoln Log Loop
P.O. Box 3088
Grand Canyon, AZ 86023
(928) 638-2443

Williams Ranger District
Danelle Harrison
District Ranger
742 S. Clover Road
Williams, AZ 86046
(928) 635-5600

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